

Title (en)

METHOD AND DEVICE FOR POWER SYSTEM PROTECTION

Title (de)

VERFAHREN UND EINRICHTUNG ZUM SCHUTZ EINES STROMVERSORGUNGSSYSTEMS

Title (fr)

PROCEDE ET DISPOSITIF DE PROTECTION D'UN SYSTEME GENERATEUR

Publication

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Application

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Abstract (en)

[origin: WO0180393A1] The present invention relates to a method for protecting a zone in a power system, which zone comprises a number of transmission lines connected to power sources and a number of transmission lines connected to a number of loads where the power sources and the loads are arranged outside the zone, wherein the method comprises the steps of: continuously measuring all the incoming currents ( $I_{in}$ ) to the zone, continuously measuring all the outgoing currents ( $I_{out}$ ) from the zone, and continuously calculating the differential current ( $I_d$ ) according to  $I_d = I_{in} - I_{out}$ . The method is characterised in continuously integrating  $I_{in}$ ,  $I_{out}$  and  $I_d$  according to Formula (I), where  $T$  is the fundamental frequency cycle, whereby changes of the continuously integrated values  $I < I_N?$ ,  $I > I_{OUT}?$  and  $I > I_D?$  constitute indications of whether faults on the power system occur within or outside the zone. The present invention also relates to a device and computer program product for performing the method.

IPC 8 full level

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